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4000-01-U

DEPARTMENT OF EDUCATION

[Docket ID ED-2014-OUS-0040]

Request for Information on the Use of APIs in Higher

Education Data and Student Aid Processes

AGENCY: Department of Education.

ACTION: Request for information.

SUMMARY: To assist in its efforts to explore potential

uses of Application Program Interfaces (APIs), the U.S.

Department of Education (Department) requests information

regarding the use of APIs in the context of higher

education data and student aid programs and processes at

the Department. We invite ideas, information, and feedback

from all interested parties for the purpose of making data

and processes in higher education and student aid more open

and accessible to students and families, in the most secure

manner, as they make an investment in postsecondary

education.

DATES: Written submissions must be received by the

Department on or before [INSERT DATE 45 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Submit your comments through the Federal

eRulemaking Portal, by submitting them to the email address

APIRFI@ed.gov, or via postal mail, commercial delivery, or

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hand delivery. We will not accept comments by fax. To ensure that we do not receive duplicate copies, please submit your comments only one time. In addition, please include the Docket ID and the term "Application Program Interfaces response" at the top of your comments.

- Federal eRulemaking Portal: Go to

 http://www.regulations.gov to submit your comments

 electronically. Information on using Regulations.gov,

 including instructions for accessing agency documents,

 submitting comments, and viewing the docket, is

 available on the site under "Are you new to this

 site?"
- <u>Email</u>: To submit comments via email, send them to the address <u>APIRFI@ed.gov</u>.
- Postal Mail, Commercial Delivery, or Hand Delivery: If you mail or deliver your comments, address them to David Soo, Attention: API RFI, U.S. Department of Education, 400 Maryland Avenue, SW, Room 7E316, Washington, DC 20202.
- <u>Privacy Note</u>: The Department's policy for comments received from members of the public (including comments submitted by mail, commercial delivery, or hand delivery) is to make these submissions available

for public viewing in their entirety on the Federal eRulemaking Portal at http://www.regulations.gov.

Therefore, commenters should be careful to include only information that they wish to make publicly available on the Internet.

Submission of Proprietary Information: Given the subject matter, some comments may include proprietary information as it relates to confidential commercial information. The Freedom of Information Act defines "confidential commercial information" as information the disclosure of which could reasonably be expected to cause substantial competitive harm. You may wish to request that we not disclose what you regard as confidential commercial information.

To assist us in making a determination on your request, we encourage you to identify any specific information in your comments that you consider confidential commercial information. Please list the information by page and paragraph numbers.

This is a request for information (RFI) only. This

RFI is not a request for proposals (RFP) or a promise to

issue an RFP or a notice inviting applications (NIA). This

RFI does not commit the Department to enter into any

agreement of any kind for any supply or service whatsoever.

The examination of information submitted in response to

Department to purchase, rent, or otherwise acquire the information demonstrated, displayed, or furnished.

Further, the Department is not seeking proposals and will not accept unsolicited proposals. The Department will not endorse any information you submit in response to this RFI and will not give any special consideration to such information on any future procurement. The Department will not pay for any information or administrative costs that you may incur in responding to this RFI. You may not file any claim against the Department or otherwise seek compensation for any information submitted in response to this RFI. If you do not respond to this RFI, you may still apply for future contracts and grants. The Department posts

this RFI will in no way, expressed or implied, obligate the

(http://www.fbo.gov). The Department announces grant

RFPs on the Federal Business Opportunities Web site

competitions in the Federal Register

(http://www.gpo.gov/fdsys). It is your responsibility to monitor these sites to determine whether the Department issues an RFP or NIA after considering the information received in response to this RFI. The documents and information submitted in response to this RFI become the property of the U.S. Government and will not be returned.

FOR FURTHER INFORMATION CONTACT: David Soo, U.S.

Department of Education, 400 Maryland Avenue, SW, Room

7E316, Washington, DC 20202. Telephone: (202) 401-0429.

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SUPPLEMENTARY INFORMATION:

Background:

A postsecondary education is among the most important investments students can make in their futures. However, obtaining postsecondary education has grown increasingly expensive, and the processes by which students get information about, apply for, and finance higher education can be challenging and complex, particularly for low-income and first-generation college-goers. While a college education remains a valuable investment overall - average weekly earnings for those with a postsecondary degree or certificate exceed those of individuals with only a high school diploma, according to the Bureau of Labor Statistics - the average borrower with a bachelor's degree now graduates with more than \$29,400 in debt, according to 2012 data from the National Postsecondary Student Aid Study. Moreover, college completion rates remain relatively low: data from the National Center for Education Statistics

indicate that only 58 percent of full-time students who began college in 2004 earned a four-year degree within six years. Students and families need reliable, timely information in an open and accessible format to identify, afford, and complete a degree or program that is affordable and will help them reach their educational and career goals.

The Administration has made access, affordability, quality, and completion in higher education centerpieces of its education agenda. With more jobs than ever requiring education beyond a high school diploma, higher education is the clearest pathway into the middle class. President Obama challenged all Americans early in his Administration to commit to at least one year of postsecondary education or training - whether at a four-year college, two-year college, or technical or trade school - and set a goal for the nation that America would once again lead the world in college completion by the year 2020. In support of these objectives, the Department provides over \$150 billion each year in student financial aid, consisting of grants, loans, and work-study opportunities to students attending postsecondary institutions nationwide. While these resources help students afford and complete postsecondary education, their utility only goes as far as the public's

awareness of and access to them. The Department recognizes that other stakeholders - including cities and States, non-profit and community-based organizations, and developers and entrepreneurs - all have a role to play in increasing access to and awareness of the resources and information available from Federal sources to help students and families access, afford, and complete college.

In August 2013, President Obama announced an ambitious agenda that aims to increase college value and affordability for American families. His plan includes measuring college performance through a new ratings system so students and families have the information to select schools that provide the best value; removing barriers that stand in the way of competition and innovation, particularly in the use of new technology, and shining a light on the most cutting-edge college practices for providing high value at low costs; and helping student borrowers struggling with their existing debt by ensuring that all borrowers who need it have access to the Pay As You Earn plan, capping loan payments at 10 percent of To promote innovation and competition in the higher education marketplace, the President's plan calls for publishing better information on how colleges are performing, helping demonstrate that new approaches can

improve learning and reduce costs, and offering colleges regulatory flexibility to innovate. In issuing this agenda, the President is challenging colleges and other higher education leaders to develop and adopt more innovative and promising practices that have the potential to dramatically improve affordability and quality.

As part of that agenda, the Administration held an "Education Datapalooza" in January 2014 to encourage entrepreneurs, technology leaders, college researchers and practitioners, students, and others to develop new tools, services, and applications (apps) to help students evaluate and select colleges, navigate how they could finance a higher education, and improve teaching and learning. During the Datapalooza, the Administration announced that it would explore the use of Application Program Interfaces (APIs) as a way to help students, families, and other stakeholders access key education processes, programs, and data as they make decisions about and investments in higher education. The Department will use the feedback it receives from this Request For Information (RFI) to explore ways in which it could integrate APIs into existing resources in collaboration with external parties and providers.

Introduction:

Through this RFI, the Department invites institutions and systems of higher education; students and parents; software developers, designers, and entrepreneurs; college counselors and quidance counselors; consumer advocates; the financial aid community; research and data experts; think tanks; privacy advocates; government agencies and officials who provide citizen-facing services; stakeholders and experts in higher education and/or technology; and any other interested party to provide ideas and feedback on the potential development of APIs using higher education data, programs, and frequently used forms (particularly in student aid) at the Department. Consistent with the Administration's approach of shared responsibility to promote better access, affordability, quality, and completion in higher education across the country, the Department seeks ideas and feedback from all sectors on how to best use freely available government data and processes to build products, services, and apps that advance postsecondary education, provide critical information to students, and help colleges innovate in creative and powerful ways. Individuals or organizations with expertise in developing and implementing APIs and/or facilitating college access and aid are strongly encouraged to respond.

An API is a set of software instructions and standards that allows machine-to-machine communication. support sharing content and data between communities and applications and can take many forms, including enabling third parties to query a data set at a granular level or submit new data on behalf of a user. APIs allow developers from inside and outside government to build apps, widgets, Web sites, and other tools based on government information and services to let consumers access government-owned data and participate in government-run processes from more places on the Web, even beyond Federal domains. designed APIs support interoperability and openness to make data and processes freely available for use within agencies, between agencies, in the private sector, or by citizens. However, government has to ensure the security and privacy of the data it maintains, especially when the information of students and families is involved. can lead to risks to privacy and security that must be fully considered and addressed.

APIs can be read-only, which allows a consumer to read material on a third-party app or Web site, or read-write, which allows a consumer to interact with and submit information, such as completing an online form. Read-only APIs have already been successfully integrated into some

Department resources, including data from the Integrated Postsecondary Education Data System (IPEDS), available at www.ed.gov/developer. An example of a read-write API is the functionality that allows individuals to complete tax returns on third-party websites and then submit that information to the Internal Revenue Service (IRS).

This RFI seeks to explore potential ways in which the Department can expand on its successful efforts to increase and enhance access to information on higher education already published on the Department's Web site, including through IPEDS, EDFacts, and other National Center for Education Statistics surveys related to higher education; data held by the Department's Office of Federal Student Aid (FSA); and data available elsewhere in the Department that focuses on higher education. The Department also seeks feedback on options for read-only and read-write APIs that could increase access to and use of benefits, forms, and processes offered for programs authorized under title IV of the Higher Education Act of 1965, as amended (HEA), including in the submission of the Free Application for Federal Student Aid (FAFSA); enrollment in Income-Driven Repayment (IDR) programs; enrollment in the Public Service Loan Forgiveness program; participation in processes offered by title IV aid servicers in repaying Federal

student loans; and use of loan counseling and financial literacy and awareness tools.

APIs could enable the development of new tools to provide consumers with better and more complete information about college affordability and performance, as well as other resources to enable informed decision making, including by expanding enrollment in student aid programs and increasing accuracy and completion in accessing these programs. Accordingly, the Department is soliciting feedback and ideas on potentially using APIs (either readonly or read-write) in the broadest context of higher education data and processes, including those discussed previously and others not explicitly listed in this notice. Suggestions about additional data that the Department could collect, or about other innovative or technology-based solutions that could better expand access to information and student aid programs in higher education, would fall outside the scope of this RFI. Nonetheless, the Department is open to all ideas.

Through this RFI, the Department is also particularly interested in specific ways in which APIs can be used effectively while continuing to safeguard student privacy and data and maintain the integrity of the taxpayer investment in Title IV student aid through prevention of

fraud, misrepresentation, and abuse. Before releasing many types of records about individuals, the Department generally must obtain the individual's prior written consent under the Privacy Act of 1974, as amended (Privacy Act), which requires the individual to specify to whom the record(s) may be disclosed, which record(s) may be disclosed, and, where applicable, during which time frame the record(s) may be disclosed. In addition, to implement the principles of the Open Government Directive, the Office of Management and Budget (OMB) Memorandum 10-23 requires the Department to take a number of steps to engage with the public directly and through third-party applications. both protect privacy and encourage the open exchange of information, we are interested in suggestions on how APIs can be developed and implemented to ensure both that students maintain free access to Federal Student Aid programs, and that there is strict adherence to Federal security guidelines and privacy laws, regulations, and quidance documents.

Information gathered through this RFI will inform possible development of APIs for higher education data and student aid processes at the Department. Following the deadline for comments on this RFI, the Department will take all ideas received into consideration as it explores the

possibility of greater use of APIs in higher education. this time, the Department is not formally committing to any expansion of the use of APIs in higher education data or student aid processes, nor is the Department obliqating or intending to obligate any appropriated funds for the development of any API. Further, by issuing this RFI, the Department is not committing to any current or future acquisition of any API or any other related information submitted in response to this RFI. Responses to this RFI will not be considered by the Department as offers and therefore cannot be accepted by the Department to form a binding contract. Although this RFI is a significant opportunity to contribute to the development of the Department's college value and affordability agenda, the Department will continue to seek input in other forums on innovation in higher education - focused on APIs and other approaches - in the spirit of advancing access and promoting success in higher education.

Context for Responses:

The primary goal of this RFI is to gather information that will help the Department explore the possible use of APIs in expanding access to higher education data and student aid programs and processes consistent with applicable security and privacy requirements. The

Department has developed several questions to guide input, but reiterates that these questions are only guides. This is not a solicitation for API proposals. Submissions do not have to respond to the specific questions, nor are submissions expected to respond to all questions. Comments may be provided in any format. Information may also be provided that is not responsive to a particular question but may still be helpful. However, the Department encourages commenters to be as specific as possible in their responses so as to best inform our ongoing work in this area.

Questions:

- A. Information Gaps and Needs in Accessing Current Data and Aid Programs
 - 1. How could data sets that are already publicly available be made more accessible using APIs? Are there specific data sets that are already available that would be most likely to inform consumer choice about college affordability and performance?
 - 2. How could APIs help people with successfully and accurately completing forms associated with any of the following processes: FAFSA; Master Promissory Note; Loan Consolidation; entrance and exit counseling; Income-Driven Repayment (IDR) programs,

- such as Pay As You Earn; and the Public Student Loan Forgiveness program?
- 3. What gaps are there with loan counseling and financial literacy and awareness that could be addressed through the use of APIs to provide access to government resources and content?
- 4. What services that are currently provided by title IV student loan servicers could be enhanced through APIs (e.g., deferment, forbearance, forgiveness, cancellation, discharge, payments)?
- 5. What current forms or programs that already reach prospective students or borrowers in distress could be expanded to include broader affordability or financial literacy information?
- B. Potential Needs to be Filled by APIs
 - 1. If APIs were available, what types of individuals, organizations, and companies would build tools to help increase access to programs to make college more affordable?
 - 2. What applications and features might developers, schools, organizations, and companies take interest in building using APIs in higher education data and services?

- 3. What specific ways could APIs be used in financial aid processes (e.g., translation of financial aid forms into other languages, integration of data collection into school or State forms)?
- 4. How can third-party organizations use APIs to better target services and information to low-income students, first-generation students, non-English speakers, and students with disabilities?
- 5. Would APIs for higher education data, processes,

 programs or services be useful in enhancing

 wraparound support service models? What other types

 of services could be integrated with higher

 education APIs?
- C. Existing Federal and Non-Federal Tools Utilizing APIs
 - 1. What private-sector or non-Federal entities currently offer assistance with higher education data and student aid programs and processes by using APIs? How could these be enhanced by the Department's enabling of additional APIs?
 - 2. What private-sector or non-Federal entities currently work with government programs and services to help people fill out government forms? Has that outreach served the public and advanced public interests?

- 3. What instances or examples are there of companies charging fees to assist consumers in completing otherwise freely available government forms from other agencies? What are the advantages and risks to consider when deciding to allow third parties to charge fees to provide assistance with otherwise freely available forms and processes? How can any risks be mitigated?
- 4. Beyond the IRS e-filing example, what other similar examples exist where Federal, State, or local government entities have used APIs to share government data or facilitate participation in government services or processes particularly at a scale as large as that of the Federal Student Aid programs?

D. Technical Specifications

- 1. What elements would a read-write API need to include for successful use at the Department?
- 2. What data, methods, and other features must an API contain in order to develop apps accessing
 Department data or enhancing Department processes, programs, or services?
- 3. How would read-only and/or read-write APIs interact with or modify the performance of the Department's

existing systems (e.g., FAFSA on the Web)? Could these APIs negatively or positively affect the current operating capability of such systems? Would these APIs allow for the flexibility to evolve seamlessly with the Department's technological developments?

- 4. What vulnerabilities might read-write APIs introduce for the security of the underlying databases the Department currently uses?
- 5. What are the potential adverse effects on successful operation of the Department's underlying databases that read-write APIs might cause? How could APIs be developed to avoid these adverse effects?
- 6. How should APIs address application-to-API security?
- 7. How should the APIs address API-to-backend security issues? Examples include but are not limited to authentication, authorization, policy enforcement, traffic management, logging and auditing, TLS (Transport Layer Security), DDoS (distributed denial-of-service) prevention, rate limiting, quotas, payload protection, Virtual Private Networks, firewalls, and analytics.

- 8. How do private or non-governmental organizations optimize the presentation layer for completion and accuracy of forms?
- 9. What security parameters are essential in ensuring there is no misuse, data mining, fraud, or misrepresentation propagated through use of readonly or read-write APIs?
- 10. With advantages already built into the

 Department's own products and services (e.g., IRS

 data retrieval using FAFSA on the Web), how would

 new, third-party API-driven products present

 advantages over existing Department resources?
- 11. What would an app, service or tool built with read-write API access to student aid forms look like?

E. Privacy Issues

1. How could the Department use APIs that involve the use of student records while ensuring compliance with potentially applicable statutory and regulatory requirements, such as the Family Educational Rights and Privacy Act (20 U.S.C. § 1232g; 34 CFR Part 99) and the Privacy Act (5 U.S.C. § 552a and 34 CFR Part 5b)?

- 2. How could APIs ensure that the appropriate individual has provided proper consent to permit the release of privacy-protected data to a third party? How can student data be properly safeguarded to prevent its release and use by third parties without the written consent often required?
- 3. How might read-only or read-write APIs collect, document, and track individuals' consent to have their information shared with specific third parties?
- 4. How can personally identifiable information (PII) and other financial information (of students and parents) be safeguarded through the use of APIs?
- 5. What specific terms of service should be enabled using API keys, which would limit use of APIs to approved users, to ensure that information is not transmitted to or accessed by unauthorized parties?
- 6. What are the relative privacy-related advantages and disadvantages of using read-only versus read-write APIs for student aid data?

F. Compliance Issues

1. What are the relative compliance-related advantages and disadvantages of using read-only versus readwrite APIs for student aid data?

- 2. How can the Department prevent unauthorized use and the development of unauthorized products from occurring through the potential development of APIs? How might the Department enforce terms of service for API key holders, and prevent abuse and fraud by non-API key holders, if APIs were to be developed and made available?
- 3. What kind of burden on the Department is associated with enforcing terms and conditions related to APIs?
- 4. How can the Department best ensure that API key holders follow all statutory and regulatory provisions of accessing federal student aid funds and data through use of third-party products?
- 5. How could prior consent from the student whom the data is about be provided for release of privacy-protected data to third party entities?
- 6. How should a legal relationship between the Department and an API developer or any other interested party be structured?
- 7. How would a legal relationship between the

 Department and an API developer or any other

 interested party affect the Department's current

 agreements with third-party vendors that operate and

 maintain the Department's existing systems?

- 8. What disclosures should be made available to students about what services are freely available in government domains versus those that could be offered at a cost by a third party?
- 9. If the Department were to use a third-party application to engage with the public on its behalf, how could the Department ensure that the Department follows the protocols of OMB Memorandum 10-23?

G. Policy Issues

- 1. What benefits to consumers or the Department would be realized by opening what is currently a free and single-point service (e.g., the FAFSA) to other entities, including those who may charge fees for freely-available services and processes? What are the potential unintended consequences?
- 2. How could the Department ensure that access to title IV, HEA student aid programs truly remains free, even amidst the potential development of third-party apps that may charge a fee for assistance in participating in free government programs, products, and services with or without providing legitimate value-added services?
- 3. What other policy concerns should the Department consider with regard to the potential development of

- APIs for higher education data and student aid processes at the Department?
- 4. How would APIs best interact with other systems already in use in student aid processes (e.g., within States)?
- 5. How would Department APIs benefit or burden institutions participating in title IV, HEA programs?
- 6. While the Department continues to enhance and refine its own processes and products (e.g., through improvements to FAFSA or the IDR application process), how would third-party efforts using APIs complement or present challenges to these processes?

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Dated: April 11, 2014

Jamienne S. Studley, Acting Under Secretary.

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